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Amendments to the Claims

Please amend the claims as follows:

1. (Currently amended) A method for correcting a color image comprising:
averaging at least two color channels in regions near the minimum of histograms
of the at least two color channels;
selecting the smallest of the average color values as a black point;
averaging at least two color channels in regions near the maximum of the
histograms of the at least two color channels; and
selecting the largest of the average color values as a white point; and
correcting the at least two color channels by adjusting the ~~smallest and the largest~~
average color values ~~averages to the respectively~~ match the values of the black point and
the white point to form corrected image data.
2. (Currently amended) The method of claim 1 wherein the correcting
~~further comprises is done with an imposed~~ imposing a clipping limit on the histogram.
3. (Currently amended) The method of claim 2 wherein the clipping limit is
imposed on each of the at least two color[[s]] channels so that no more than a
predetermined percentage of pixels are identified as black or white pixels.
4. (Original) The method of claim 1 wherein regions of the histogram near
the minimum color values of histograms for at least two colors are selected based on the
darkest non-black pixels in the histogram of the image.
5. (Original) The method of claim 1 wherein regions of the histogram near
the maximum color values of histograms for at least two colors are selected based on the
lightest non-white pixels in the histogram of the image.
6. (Currently amended) The method of claim 1 wherein an original position
and a final position of smallest color averages and an original position and a final

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position of largest color averages define two points through which a linear interpolation is used to create a look-up table for correcting color data.

7. (Original) The method of claim 6 where conceptual movement of smallest color averages in the histogram is equal to the smaller of that required to achieve alignment with a black point and that required to achieve a predetermined level of clipping and conceptual movement of largest color averages is equal to the smaller of that required to achieve alignment with a white point and that required to achieve a predetermined level of clipping.

8. (Original) The method of claim 6 wherein smallest color averages are aligned with the black point and largest color averages are aligned with the white point and the white and black points are conceptually moved towards each other, maintaining the alignment until clipping of all colors is reduced to no more than a predetermined amount.

9. (Currently amended) The method of claim 1 wherein the color image has an original brightness distribution and the corrected image data has an adjusted brightness distribution, and further comprising:

replacing the adjusted brightness distribution for the corrected image data with the original brightness distribution for the color image after adjustment of colors, resulting brightness distribution is replaced by the original image distribution of the image, colors.

10. (Currently amended) The method of claim 3 wherein the color image has an original brightness distribution and the corrected image data has an adjusted brightness distribution, and further comprising:

replacing the adjusted brightness distribution for the corrected image data with the original brightness distribution for the color image after adjustment of color, resulting brightness distribution is replaced by the original image brightness distribution, colors.

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11. (Currently amended) The method of claim 7 wherein the color image has an original brightness distribution and the corrected image data has an adjusted brightness distribution, and further comprising:

replacing the adjusted brightness distribution for the corrected image data with the original brightness distribution for the color image after adjustment of colors, resulting brightness distribution is replaced by the original image distribution of the image.

12. (Currently amended) The method of claim 8 wherein the color image has an original brightness distribution and the corrected image data has an adjusted brightness distribution, and further comprising:

replacing the adjusted brightness distribution for the corrected image data with the original brightness distribution for the color image after adjustment of colors, resulting brightness distribution is replaced by the original image distribution of the image.

13. (Original) The method of claim 9 wherein brightness is computed in a color space in which the brightness approximately matches human perception.

14. (Original) The method of claim 10 wherein brightness is computed in a color space in which the brightness approximately matches human perception.

15. (Original) The method of claim 11 wherein brightness is computed in a color space in which the brightness approximately matches human perception.

16. (Original) The method of claim 1 wherein after color adjustment, a selected illuminant color temperature correction is applied to digital image data of the color image.

17. (Original) The method of claim 3 wherein after color adjustment, a selected illuminant color temperature correction is applied to digital image data of the color image.

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18. (Original) The method of claim 7 wherein after color adjustment, a selected illuminant color temperature correction is applied to digital image data of the color image.
19. (Original) The method of claim 8 wherein after color adjustment, a selected illuminant color temperature correction is applied to digital image data of the color image.
20. (Original) The method of claim 9 wherein after color adjustment, a selected illuminant color temperature correction is applied to digital image data of the color image.
21. (Original) The method of claim 1 wherein at least three color channels are averaged in regions near the minimum and the maximum color values of histograms of the at least three color channels.
22. (Original) The method of claim 21 wherein averages of maximum values and averages of minimum values for all three colors are compared.
23. (Original) The method of claim 22 wherein the largest of the average maximum values of color histograms determines the amount of conceptual movement of the average maximum values for all colors towards the white point.
24. (Original) The method of claim 22 wherein the smallest of the average minimum values of color histograms determines the amount of conceptual movement of the average minimum values for all colors towards the black point.
25. (Currently amended) The method of claim 1 wherein a separate look-up table of color temperatures in a three dimensional color space is provided, [[and]] temperature corrections for images are identified, and temperature corrections are added to the corrected image data.

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26. (Currently amended) The method of claim 22 wherein a separate look-up table of color temperatures in an at least two-dimensional color space is provided, [[and]] temperature corrections for images are identified, and temperature corrections are added to the corrected image data.

27. (Original) The method of claim 9 wherein brightness is computed according to a linear combination of red, green and blue data.

28. (Original) The method of claim 10 wherein brightness is computed according to a linear combination of red, green and blue data.

29. (Original) The method of claim 11 wherein brightness is computed according to a linear combination of red, green and blue data.

30. (New) A computer-readable medium having computer-executable instructions for performing steps for correcting a color image comprising:
averaging at least two color channels in regions near the minimum of histograms of the at least two color channels;
selecting the smallest of the average color values as a black point;
averaging at least two color channels in regions near the maximum of the histograms of the at least two color channels;
selecting the largest of the average color values as a white point; and
correcting the at least two color channels by adjusting the smallest and the largest color averages to respectively match the values of the black point and the white point to form corrected image data.

31. (New) A method for correcting a color image having two or more color channels, comprising:

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identifying a first subset of pixels having color values located substantially within a defined range for a first color channel;

computing a first average color value for the first subset of pixels for the first color channel as a first reference point; and

adjusting a second average color value for the first subset of pixels for a second color channel towards the first reference point.

32. (New) The method of claim 31 further comprising:

identifying a second subset of pixels having color values located substantially within a second defined range for a selected one of the two or more color channels;

computing a second subset first average color value for the second subset of pixels for the selected one of the two or more color channels as a second reference point; and

adjusting a second subset second average color value for the second subset of pixels for a second selected one of the two or more color channels towards the second reference point.

33. (New) The method of claim 32 wherein the selected one of the two or more color channels can be the same as one of the first or second color channels.

34. (New) The method of claim 32 wherein the second selected one of the two or more color channels can be the same as one of the first or second color channels.

35. (New) The method of claim 32 further comprising:

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constructing a linear look-up table between a point defined by the first average color value and the first reference point, and a point defined by the second subset second average color value and the second reference point; and

applying the look-up table to modify the color values in the image.

36. (New) A computer-readable medium having computer-executable instructions for performing steps for correcting a color image having two or more color channels, comprising:

identifying a first subset of pixels having color values located substantially within a defined range for a first color channel;

computing a first average color value for the first subset of pixels for the first color channel as a first reference point; and

adjusting a second average color value for the first subset of pixels for a second color channel towards the first reference point.

37. (New) The computer-readable medium of claim 36 further comprising:

identifying a second subset of pixels having color values located substantially within a second defined range for a selected one of the two or more color channels;

computing a second subset first average color value for the second subset of pixels for the selected one of the two or more color channels as a second reference point; and

adjusting a second subset second average color value for the second subset of pixels for a second selected one of the two or more color channels towards the second reference point.